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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/705,575	11/03/2000	Ernest L. Lawton	1596C9	6944

7590 08/29/2002

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EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 08/29/2002

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/705,575	LAWTON ET AL.	
	Examiner	Art Unit	
	Jill M Gray	1774	

-- Th MAILING DATE of this communication appears on th cover sh t with th corr spond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2002.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
 - 4a) Of the above claim(s) 12-17, 26-31 and 35-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-11, 18-25 and 32-34 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some * c) ☐ None of:
 - 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The rejection of claims 1-9 and 18-27 under 35 U.S.C. 102(b) as being anticipated by Terpay, 4,282,011, is withdrawn in view of applicants arguments.

The rejection of claims 8-17 and 29-30 under 35 U.S.C. 102(b) as being anticipated by Philips, 3,312,569, is withdrawn upon further consideration.

Election/Restrictions

1. Applicant's election with traverse of boron nitride as the elected species in Paper No. 12 is acknowledged. The traversal is on the ground(s) that no serious burden in examining all of the species of the claimed particles is present. This is not found persuasive because the properties and functions of each of the particles are not necessarily the same and can necessitate different searches, such as graphite and calcium carbonate.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 9-11, 18-25, and 32-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Barber, Jr. et al, 5,460,883 (Barber).

4. Barber teaches composite abrasive filaments comprising a core at least partially coated with a coating composition comprising greater than 20 weight percent of particles, wherein the resin is a resin compatible coating composition as required by claims 1-2 and 18-19. See column 21, lines 24-28. Also, Barber teaches a coating that comprises at least one lubricious material different from the particles and at least one film-forming material, further teaching the application of a sizing material and a tertiary coatings, as required in claims 20-25 and 32-33. See column 20, lines 39-58, column 24, and lines 5-7. In addition, Barber teaches that the particles can be boron nitride as required by claims 9-11. See column 21, line 16. As to the Mohs' hardness value, which does not exceed the Mohs' hardness value of the glass fibers, this property is inherent in the particles of Barber.

5. Claims 1-4, 18-21, 24-25, and 32-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Philipps et al, 3,312,569.

6. Philipps teaches a fibrous glass strand comprising a coating composition comprising greater than 20 weight percent of particles and a resin compatible coating composition that can be an aqueous coating composition. In addition, Philipps teaches that the coating composition further comprises at least one lubricious material different from the particles, at least one film-forming material, and a resin reactive diluent with one or more functional as required by claims 1-2, 4, 20-21, 24-25, and 32-33. See column 4, lines 35-41 and 60-74. As to claims 3 and 34, it is the position of the examiner that this property is inherent in the particles of Philipps. As to claims 18-19, Philipps teaches amounts within applicants' range.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 6-9, 18, 21-25, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terpay, 4,282,011 in view of Barber, '883 and Jia, 6,270,562 B1.

9. Terpay teaches a fabric comprising a coated fiber strand comprising an aqueous coating applied to at least a portion of one glass fiber, said coating comprising a polymeric material such as epoxy or acrylic polymers and contains particles of the type contemplated by claim 9, wherein properties such as the Mohs' hardness and thermal conductivity are inherent. Terpay is silent as to the amount of particles present. Barber, as set forth above, teaches a composite abrasive filament comprising a coating composition comprising a polymeric material and particles present in an amount of greater than 20 weight percent. It would have been obvious to one of ordinary skill in that art at the time the invention was made to modify the composition of Terpay by including the particles in an amount of greater than 20 weight percent as taught by Barber to increase abrasion characteristics of the fabric. As to claims 6-8, it is the examiner's that glass fibers of the type contemplated by applicants are well known in the art as evidenced by the teachings of Jia, cited to show the state of the art, whereby it would have been obvious to the skilled artisan to choose any of the various types with

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the reasonable expectation of success of obtaining a suitable glass fiber strand. As to the specific type of glass, this is not seen to be a matter of invention in the absence of factual evidence to the contrary.

Response to Arguments

10. Applicant's arguments with respect to claims 1-9 and 18-27 as being anticipated by Terpay have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed June 21, 2002 have been fully considered but they are not persuasive.

12. Applicants argue that Philipps focuses on adhering particles to the surface of fibers whereas the claimed invention is directed to an at least partially coated fiber strand.

13. In this regard, the language of "at least partially coated fiber" is non-specific as to what the coating material can comprise. Particulate material adhered to a filament surface necessarily results in an "at least partially coated" filament. Several of these filaments combined to form a strand necessarily results in an "at least partially coated fiber strand". Hence, in this regard, the teachings of Philipps appear to be the same as that set forth by applicants.

14. Arguments with respect to claims 28 and 29 are moot in view of the election of species requirement and subsequent holding of these claims as being non-elected.

Allowable Subject Matter

15. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M Gray whose telephone number is 703.308.2381. The examiner can normally be reached on 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703.308.0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.5408 for regular communications and 703.305.3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0651.


Jill M Gray
Examiner
Art Unit 1774

jmg
August 26, 2002